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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HENLEY III, RAYMOND J	
ART UNIT	PAPER NUMBER
1614	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/869,333	PAMPARANA, FRANCO	
	Examiner	Art Unit	
	Raymond J. Henley III	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,16,18-20,22 and 30-73* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16,18-20,22 and 30-73* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/8/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

CLAIMS 13-14, 16, 18-20, 22 AND 30-73 ARE PRESENTED FOR EXAMINATION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Because this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on December 8, 2006 has been entered. Accordingly, claims 18 and 30-35 have been amended; claims 24, 25, 27 and 28 have been canceled; and claims 36-73 have been added. Also, as reflected by the attached, completed copy of form "HDP-1449", the referenced cited thereon have been considered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejection - 35 USC § 112, First Paragraph

Claims 36-49 and 62-73 are rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for a method of *reducing the incidence of* mortality or sudden death *caused by reoccurrence of cardiovascular events* in a patient who has survived a myocardial infarction, does not reasonably provide enablement for a method of *preventing* mortality or sudden death in general, (i.e., not related to an adverse cardiovascular event), in a patient who has survived a myocardial infarction. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

Burden on the Examiner for Making a Rejection Under 35 U.S.C. § 112 First Paragraph

As set forth in *In re Marzocchi*, 169 USPQ 367, 370 (CCPA 1971):

"[A] [s]pecification disclosure which contains teaching of manner and process of making and using the invention in terms corresponding to the scope to those used in describing and defining subject matter sought to be patented must be taken as in compliance with enabling requirement of first paragraph of 35 U.S.C. 112 *unless there is reason to doubt the objective truth of statements contain therein which must be relied on for enabling support*; assuming that sufficient reason for such doubt exists, a rejection for failure to teach how to make and/or use will be proper on that basis, such a rejection can be overcome by suitable proofs indicating that teaching contained in specification is truly enabling." (emphasis added).

Here, the objective truth of the statements that (i) mortality or sudden death caused by a reoccurrence of a myocardial infarction a patient who has survived a myocardial infarction can actually be prevented and/or (ii) mortality or sudden death in general, (i.e., not related to a myocardial infarction, but a non-cardiovascular event such as blunt-force trauma, Alzheimer's diseases, AIDS or drowning), could either be reduced in their incidence or prevented, (i.e., prevention of mortality/sudden death allows for the objective of causing the patient to become immortal upon ingestion of the claimed fatty acids), is doubted because (i) it flies in the face of accepted knowledge in the art that, by any means known, pharmacological or otherwise, immortality cannot be conferred upon any animate host, and (ii) the state of the art (see the references relied upon *infra*) indicates that, at best, only the incidence of mortality caused by reoccurrence of cardiovascular events in a patient who has survived a myocardial infarction *can be reduced* and <u>not</u> completely eliminated, i.e., prevented, as alleged and claimed by Applicant.

Breadth of Claims

As per MPEP § 2111, the Examiner is <u>*required*</u> to give claim language the broadest, reasonable interpretation consistent with the specification. The present specification does not

impart any definition to the terms "mortality" or "sudden death". Accordingly, the Examiner is taking the plain meaning of the terms employed in the present claims to point out that the claims embrace incidences where (i) mortality or sudden death caused by a reoccurrence of a myocardial infarction a patient who has survived a myocardial infarction can actually be prevented and/or (ii) mortality or sudden death in general, (i.e., not related to a myocardial infarction, but a non-cardiovascular event such as blunt-force trauma, Alzheimer's diseases, AIDS or drowning), could either be reduced in their incidence or prevented.

Further, with respect to the term "preventing", it is synonymous with the term "curing" and both circumscribe methods of absolute success. Because absolute success is not reasonably possible with most diseases/disorders, especially those having an etiology and pathophysiological manifestations as complex/poorly understood as mortality, either caused by reoccurrence of cardiovascular events in a patient who has survived a myocardial infarction or not, the specification, which lacks an objective showing that mortality from any cause can actually be prevented, is viewed as lacking an enabling disclosure of the same.

The Examiner further notes that if, indeed, mortality from any cause could actually be prevented, the creation of an immortal state of being would then be established. The Examiner believes, however, that the skilled artisan would not accept such a contention on its face without extensive supporting documentation, which is here lacking.

The State of the Art

In particular, as Applicants themselves have acknowledged at page 2, lines 11-17 of the present specification:

"However, *currently used treatments in human therapy have been shown to be insufficient in preventing cardiovascular events, and more specifically mortality*, in particular due to sudden death, which happen in patients who have had a myocardial infarction, on account of recurrences after a first acute myocardial infarction episode. Therefore, *there still is the need for an effective drug, in particular for preventing these recurrences*."(emphasis added).

In the Burr et al. reference (previously cited by Applicant,11/22/2004, reference No. 3 under "Other Documents"), concerning a randomized controlled trial which involved the administration of fatty acids of the type presently claimed, the authors note:

"The subjects advised to eat fatty fish [e.g. mackerel, herring, salmon and trout [(page 757, col. 2, last line – page 757, col. 1, line 1) which contains fatty acid compounds of the type claimed (see Schmidt et al., newly cited by Applicants, Ref. Desig. No. 7 at page 3 "Intake of n-3 FA-Type and Dose")] has a 29% *reduction* in 2 year all-cause mortality compared to those not so advised...[t]he 2 year incidence of reinfarction plus death from ischaemic heart disease was not significantly affected by any of the dietary regimens."(page 757, col. 1 under the heading "Summary"; emphasis added).

Finally, as a further example of the art recognizing that the incidence of the presently claimed mortality may be reduced rather than prevented, the Examiner points to Schmidt et al., (previously cited by Applicants, *Id.*, reference No. 7) at page 129, within a section beginning at page 125 entitled "12. n-3 Fatty Acids and Sudden Cardiac Death"). Therein, the authors acknowledge "[d]ietary supplementation with fish oil has been shown to *decrease* mortality after myocardial infarction in some studies." (page 129, line 1 of third full paragraph).

Presence or Absence of Working Examples

The Examiner has also considered the present specification and data contained therein in making a determination as to whether or not the claims, to their entire breadth, are enabled. At pages 3 and 4 of the specification, Applicant has described, i.e., complete data have not been presented, a clinical trial which establishes that a reduction in mortality/sudden death associated with a cardiovascular even in patients who had previously suffered a myocardial infarction has

occurred. In referencing such a reduction, however, Applicant has not demonstrated on the record that such mortality/sudden death, or mortality/sudden death due to non-cardiovascular events, such as trauma, infection or drowning, could be *prevented*.

Summary

As the cited art and discussion above establish, practicing the claimed method in the manner disclosed by Applicants would *not* imbue the skilled artisan with a reasonable expectation that mortality caused by reoccurrence of cardiovascular events in a patient who has survived a myocardial infarction could actually be prevented. In order to actually achieve the prevention of such mortality, it is clear from the discussion above that the skilled artisan could not rely on Applicant's disclosure as required by 35 U.S.C. § 112, first paragraph. Given that the art fails to recognize, and Applicants have failed to demonstrate, that mortality caused by reoccurrence of cardiovascular events in a patient who has survived a myocardial infarction could actually be prevented, the skilled artisan would be faced with the impermissible burden of undue experimentation in order to practice this embodiment of the claimed invention. Accordingly, all of the claims presented for examination are deemed properly rejected.

Applicant's Arguments

To the extent that Applicant's remarks at pages 12-14 of their most recent submission pertain to the above rejection, such have been carefully considered, but, for the reasons below, fail to persuade the Examiner of error in his determination.

Applicant has taken the position that the prevention of mortality due to all-causes in patients who have suffered a myocardial infarction is a well recognized end point. In support

of this position, Applicant has relied on several articles which relate to "all-cause death" as a clinical endpoint or to the effects of omega-3 fatty acids on cardiovascular events.

The Examiner notes that the references set forth "all-cause mortality" as an endpoint in studies dealing with omega-3 fatty acids and cardiovascular health. The use of such parameter, however, does not equate to a recognition in the art that omega-3 fatty acids would be effective against deaths which are unrelated to cardiovascular events. The Examiner finds nowhere in the art cited by Applicants any recognition that omega-3 fatty acids may prevent a patient from dying where the death is from non-cardiovascular events such as blunt-force trauma, Alzheimer's diseases, AIDS or drowning, (i.e., impart immortality to the patient),

Further, where the mortality is due to cardiovascular events, the articles relied on merely show that omega-3 fatty acids reduce the incidence of such mortality. A *reduction of the incidence* of such mortality does not equate to the *prevention* of such mortality.

For the reasons above, the claims are deemed properly rejected.

Overcoming the Present Rejection

The present rejection may be overcome by amending the claims to indicate that the sudden death and mortality are due to the disclosed cardiovascular events and that the incidence of such sudden death and mortality is reduced.

Claim Rejection - 35 USC § 103

Claims 12-14, 16, 18-20, 22, 30-35 and 50-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breivik et al. (U.S. Patent No. 5,502,077) in view of Harrison's Principles of Internal Medicine ("Harrison's), each of record, for the reasons of record as set

forth in the previous Office action dated March 9, 2006 at pages 2-5, which reasons are here incorporated by reference.

Applicant's remarks at pages 14-17 of their most recent submission have been carefully considered. For the reasons to follow, the remarks have not been afforded the significance urged and the rejection is deemed to remain proper.

In attempting to refute the propriety of the present rejection, Applicant has concluded that "...it would not have been obvious to use omega-3 fatty acids for the prevention of cardiovascular **events** simply because it was known that omega-3 fatty acids were useful for treating cardiovascular **risk factors**.", (emphasis original, amendment at page 15, third paragraph). Applicant's conclusion rests upon the disclosure in several articles where it was shown that other compounds, which are not structurally or functionally related to omega-3 fatty acids, did not "necessarily help in the prevention of cardiovascular events", (amendment at page 15, third paragraph).

The Examiner will not agree with Applicant's position for the following reasons. Applicant's remarks are directed to the prevention of cardiovascular events while the present claims subject to rejection are directed to reducing the occurrence of adverse cardiovascular events. The Examiner is not surprised that prevention was not shown as it is an outcome of absolute success rather than the less stringent measure of merely reducing the occurrence of a cardiovascular event.

Secondly, on its face, it is clearly reasonable to hold the belief that an agent which reduces the risk of an event from occurring would reduce the incidence of that event. Breivik et al. (U.S. Patent No. 5,502,077), the primary reference relied on by the Examiner, not only

narrates the usefulness of omega-3 for treating not one, but multiple risk factors of cardiovascular diseases, but also demonstrates this at cols. 6-10 under "Biological Effects". If such risk factors become non-existent through an efficacious regimen of omega-3 fatty acid administration, a patient would not longer have those factors which predispose him/her to suffer a cardiovascular event. Thus, the occurrence rate of the cardiovascular event would be reduced.

Thirdly, it is not shown in the references relied on by Applicant, and Applicant has not offered any reasons, why the results obtained with the drugs in Applicant's references would have been predictive of results that would occur with the claimed omega-3 fatty acids. The compounds in Applicant's references, e.g., fenofibrate, (an HMG-CoA reductase inhibitor), doxazosin, (an alpha-1 receptor antagonist) and chlorthalidone, (a diuretic), are structurally, mechanistically and functionally distinct from omega-3 fatty acids and it is not seen that any meaningful conclusion can be drawn from the actions of such compounds to the actions of omega-3 fatty acids.

Finally, the Examiner notes that if one were to draw Applicant's position to its logical end-point, then one would also say that it would not have been obvious to use any therapeutic, e.g., aspirin, for reducing the occurrence or reoccurrence of adverse cardiovascular events even though it is known that the agent was useful for treating multiple cardiovascular risk factors. The Examiner does not believe such a position to be tenable.

None of the claims are currently in condition for allowance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Henley III whose telephone number is 571-272-0575. The examiner can normally be reached on M-F, 8:30 am to 4:00 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raymond J Henley III
Primary Examiner
Art Unit 1614

March 2, 2007